# Results of a Written Survey: Wood Pellets and Pellet Heating Systems in Germany, Austria and Switzerland in 2000

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### 1 Method

In July 2000 C.A.R.M.E.N. startet a written survey to obtain an overview over the production and sales amount of biomasss pellets and pellet heating systems in Germany, Austria and Switzerland by sending a questionnaire to 87 producers and deliverers of wood pellets and pellet heating systems.

### 2 Results

#### 2.1 Wood Pellets

45 questionnaires were sent to producers and deliverers of wood pellets in Germany. Up to August 2000, 20 returns have been registered (feedback quota: 44 %). 12 of 24 questionnaires returned from Austria (feedback quota: 50 %) and only 1 of 13 questionnaires returned from Switzerland. Among this 33 participants were 16 pellet producers (8 in Germany, 7 in Austria, 1 in Switzerland) and 17 pellet deliverers (13 from Germany and 4 from Austria).

The 8 pellet factories in Germany showed production capacities between 200 and 18,000 tons per year (whole production capacity in 1999: 39,915 tons), the 7 Austrian companies showed capacities between 8,000 and 40,000 tons per year (125,000 tons). The production of 5 pellet producers in Germany increased from 200 tons per year in 1996 to 14,030 tons per year in 1999. In the same time the 7 Austrian companies were able to increase their production from 13,600 tons per year to 60,000 tons per year. From 8 pellet factories in Germany only 7 were used partly for the production of fuel pellets, but mainly for the production of pet food pellets. In Austria 4 pellet factories were part of the wood-working industry.

The german pellet suppliers mainly delivered wood pellets to german consumers. In the opposite, most pellet suppliers from Austria also delivered wood pellets to neighbour countries, e.g Germany, Italy, Switzerland and the Netherlands. Most of the pellet suppliers (12 firms) were fuel dealers, mainly selling heating oil and coal briquettes. But also some pellet stove dealers (5 firms) offered pellets for sale until the wood pellet market will be fully developed. Most of the german pellet suppliers got pellets from Austria, but mainly on the basis of quality, pellet suppliers in Austria only obtained wood pellets from Austrian pellet producers.

Wood pellets were mostly required with a diameter of 6 millimetres (30 firms). 7 producers/suppliers also delivered wood pellets with a diameter of 8 millimetres and one pellet producer offered pellets with a diameter of 3 millimetres. The biggest pellets with diameters

between 14 and 30 millimetres were offered by 3 german pellet producers. The length of the pellets varied between 4 and 50 millimetres.

Almost every producer ans supplier explained the possibility of delivering pellets in bags. The survey showed that wood pellets were mostly offered in bags of 15 and 25 kg with prices around 250 Euro per ton. Pellets in big bags (foil bags with a content of 1.5 m<sup>3</sup>) were offered by 7 german producers. 14 producers and even 11 deliverers maintained to deliver loose wood pellets by use of a pump-tank car. If pellets would have been ordered in big amounts (e.g. 3 tons or more), prices could have ranged from 120 to 170 Euro/ton.

## 2.2 Pellet Heating Systems

32 questionnaires were sent to producers and deliverers of pellet heating systems in Germany. Up to November 2000, 15 returns have been registered (feedback quota: 47 %). 12 from 38 questionnaires returned from Austria (feedback quota: 32 %) and only 2 from 12 questionnaires returned from Switzerland. There have been 16 producers (4 from Germany, 11 from Austria, 1 from Switzerland) and 13 deliverers (11 from Germany, 1 from Austria and 1 from Switzerland) among this 29 participants.

From the year 1994 until the year 1999, 20 companies (4 producer and 4 deliverer from Germany, 11 producer from Austria and 1 producers from Switzerland) have sold 6,475 pellet heating systems with a total heating load of aprox. 104 MW. In Germany and Austria most of them (aprox. 52 %) have been sold in 1999. The sales of these 20 companies to Germany, Austria and to other EU-countries have been as follows:

	pellet heating systems	total heating load
Germany	1,724	19 MW
Austria	4,379	81 MW
other EU-countries	372	4 MW
total	6.475	104 MW

About 67 % of the pellet heating systems sold in Germany have been pellet stoves but more than 92 % of the systems sold in Austria have been central heating systems.